



108236-130.ST25

11

SEQUENCE LISTING

<110> Moore, Jeffrey G.

<120> Compositions and Methods for Protecting Tissues and Cells from Damage, and for Repairing Damaged Tissues

<130> 108236.130

<140> US 10/083, 936

<141> 2002-02-27

<150> US 60/271, 666

<151> 2001-02-27

<150> US 60/302, 716

<151> 2001-07-03

<160> 10

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 939

<212> DNA

<213> Dolichos lablab

<400> 1

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aaccctgtga gttctagtgc gggaaagatg ttatattctg caccattgcg ccttggaa 180
gactctgcgg tattgacaag ctttgacacc attatcaact ttgaaatctc aacacattac 240
acttctcgta tagctgatgg ctggcccttc ttcattgcac cacctgactc tgtcatcagt 300
tatcatggtg gtttcttgg actctttccc aacgcaaaca ctctcaacaa ctctccacc 360
tctgaaaacc aaaccaccac taaggcgtca tcaagcaacg ttgtgctgt tgaatttgac 420
acatatctta atcccgatta tggtgatcca aactacatac acatcgaaat tgacgtcaac 480
tctatttagat ccaaggtaac tgctaagtgg gactggcaaa atggaaaaat agccactgca 540
cacattagct ataactctgt ctctaaaaga ctatctgtt ctgttatttt tgctggag 600
aaacacctcgaa ctctcccta tgatatttag ttacatacag tgcttcctga atgggtcaga 660
gtagggttat ctgctcaac tggacaagat aaagaaagaa ataccgttca ctcatggtct 720
ttcaactcaa gcttgtggac caatgtggcg aagaaggaga atgaaaacaa gtatattaca 780
agaggcgttc tgtgatgata tatgtgtatc aatgattttc tatgttataa gcatgtaatg 840
tgcgatgagt caataatcac aagtacagt tagtacttgt atgttggttg tgtaagagtc 900
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<210> 2

<211> 264

<212> PRT

<213> Dolichos lablab

<400> 2

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1 5 10 15

Asp Leu Ile Phe Gln Gly His Ala Thr Ser Thr Asn Asn Val Leu Gln

	20	25	30												
Val	Thr	Lys	Leu	Asp	Ser	Ala	Gly	Asn	Pro	Val	Ser	Ser	Ser	Ala	Gly
			35		40							45			
Arg	Val	Leu	Tyr	Ser	Ala	Pro	Leu	Arg	Leu	Trp	Glu	Asp	Ser	Ala	Val
			50		55						60				
Leu	Thr	Ser	Phe	Asp	Thr	Ile	Ile	Asn	Phe	Glu	Ile	Ser	Thr	Pro	Tyr
			65		70						75				80
Thr	Ser	Arg	Ile	Ala	Asp	Gly	Leu	Ala	Phe	Phe	Ile	Ala	Pro	Pro	Asp
			85				90					95			
Ser	Val	Ile	Ser	Tyr	His	Gly	Gly	Phe	Leu	Gly	Leu	Phe	Pro	Asn	Ala
			100			105						110			
Asn	Thr	Leu	Asn	Asn	Ser	Ser	Thr	Ser	Glu	Asn	Gln	Thr	Thr	Thr	Lys
			115			120						125			
Ala	Ala	Ser	Ser	Asn	Val	Val	Ala	Val	Glu	Phe	Asp	Thr	Tyr	Leu	Asn
			130			135					140				
Pro	Asp	Tyr	Gly	Asp	Pro	Asn	Tyr	Ile	His	Ile	Gly	Ile	Asp	Val	Asn
			145			150					155				160
Ser	Ile	Arg	Ser	Lys	Val	Thr	Ala	Lys	Trp	Asp	Trp	Gln	Asn	Gly	Lys
			165			170						175			
Ile	Ala	Thr	Ala	His	Ile	Ser	Tyr	Asn	Ser	Val	Ser	Lys	Arg	Leu	Ser
			180			185						190			
Val	Thr	Ser	Tyr	Tyr	Ala	Gly	Ser	Lys	Pro	Ala	Thr	Leu	Ser	Tyr	Asp
			195			200					205				
Ile	Glu	Leu	His	Thr	Val	Leu	Pro	Glu	Trp	Val	Arg	Val	Gly	Leu	Ser
			210			215					220				
Ala	Ser	Thr	Gly	Gln	Asp	Lys	Glu	Arg	Asn	Thr	Val	His	Ser	Trp	Ser
			225			230					235				240
Phe	Thr	Ser	Ser	Leu	Trp	Thr	Asn	Val	Ala	Lys	Lys	Glu	Asn	Glu	Asn
			245			250						255			
Lys	Tyr	Ile	Thr	Arg	Gly	Val	Leu								
						260									

<210> 3
<211> 1005
<212> DNA
<213> Dolichos lablab

<400> 3
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tcagccgcac agtcattgtc atttagttc accaagtttgc atcctaacca agaggatctt 120
atcttccaag gtcatgccac ttctacaac aatgtcttac aagtccacaa gtttagacagt 180
gcaggaaacc ctgtgagttc tagtgccgga agagtgttat attctgcccatttgcgcctt 240

tgggaagact ctgcgttatt gacaaggctt. gacaccatta tcaacttga aatctcaaca 300
 ccttacacctt ctcgtatacg tgatggcttg gcctcttca ttgcaccacc tgactctgtc 360
 atcagttatc atgggtggtt tcttggactc tttcccaacg caaacactct caacaactct 420
 tccacctctg aaaacccaaac caccactaag gctgcatcaa gcaacgttgt tgctgttcaa 480
 tttgacacccat atcttaatcc cgattatggt gatccaaact acatacacat cgaaattgac 540
 gtcaactcta ttagatccaa ggtaactgct aagtggact ggcaaaatgg gaaaatagcc 600
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 gggagtaaac ctgcgactct ctccttatgtt attgagttac atacagtgt tcctgaatgg 720
 gtcagagtag ggttatctgc ttcaactgga caagataaag aaagaaatac cgttcaactca 780
 tggctttca cttcaagctt gtggaccaat gtggcgaaga aggagaatga aaacaagtat 840
 attacaagag gcgttctgtg atgatataatg tgtatcaatg attttctatg ttataagcat 900
 gtaatgtgcg atgagtcaat atcacaatg acagtgtatg acttgtatgt tgttgtgt 960
 agagtcaatg tgcttttaat ataacaatg gcagtttagta cttgt 1005

<210> 4

<211> 22

<212> PRT

<213> Dolichos lablab

<400> 4

Met	Ala	Ser	Ser	Asn	Leu	Leu	Thr	Leu	Ala	Leu	Phe	Leu	Val	Leu	Leu
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Thr His Ala Asn Ser Ala

20

<210> 5

<211> 914

<212> DNA

<213> Phaseolus vulgaris

<400> 5

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 aaccctgtgg gtgctagtgt ggaaagatg ttattctctg caccatttc tctttggaa 180
 aactctatgg cagtgtaaag ctttggaaact aatctcacca ttcaaatctc aacacctcac 240
 ctttattatg cagctgatgg ctttgcctc ttccctgcac cacatgacac tgcacccct 300
 ccaaattctt ggggcaaaatt ctttggactc tactcaaacg ttttcagaaa ctccccacc 360
 tctgaaaacc aaagcttgg tgatgtcaat actgactcaa gagttgttgc tgcacccct 420
 gacacccctcc ctaatgccaa tattgatcca aattacagac acattggaaat cgatgtgaac 480
 tctttaatgtt ccaaggaaac tgcttaggtgg gagttggcaaa atggaaaac ggccactgca 540
 cgcacatcgtcataactctgc ctctaaaaaa tcaactgttca ctacgttttca tcctggatg 600
 gaagttgtgg ctctctccca tgatgttgc ttacatgcag agcttccctga atgggtttaga 660
 gttagggttat ctgctcaac tggagaggag aaacaaaaaa ataccattat ctcatggct 720
 ttcaacttcaa gcttgaagaa caacgaggtt aaggagccga aagaagacat gtatattgca 780
 aacgttgtgc gatcatatac atggatcaat gacgttctat cttatataag caataaataa 840
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<210> 6

<211> 303

<212> PRT

<213> Phaseolus vulgaris

<400> 6

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 Asp Leu Ile Phe Gln Gly Asp Ala Thr Ser Thr Asn Asn Val Leu Gln
 20 25 30
 Leu Thr Lys Leu Asp Ser Gly Gly Asn Pro Val Gly Ala Ser Val Gly
 35 40 45
 Arg Val Leu Phe Ser Ala Pro Phe His Leu Trp Glu Asn Ser Met Ala
 50 55 60
 Val Ser Ser Phe Glu Thr Asn Leu Thr Ile Gln Ile Ser Thr Pro His
 65 70 75 80
 Pro Tyr Tyr Ala Ala Asp Gly Phe Ala Phe Phe Leu Ala Pro His Asp
 85 90 95
 Thr Val Ile Pro Pro Asn Ser Trp Gly Lys Phe Leu Gly Leu Tyr Ser
 100 105 110
 Asn Val Phe Arg Asn Ser Pro Thr Ser Glu Asn Gln Ser Phe Gly Asp
 115 120 125
 Val Asn Thr Asp Ser Arg Val Val Ala Val Glu Phe Asp Thr Phe Pro
 130 135 140
 Asn Ala Asn Ile Asp Pro Asn Tyr Arg His Ile Gly Ile Asp Val Asn
 145 150 155 160
 Ser Ile Lys Ser Lys Glu Thr Ala Arg Trp Glu Trp Gln Asn Gly Lys
 165 170 175
 Thr Ala Thr Ala Arg Ile Ser Tyr Asn Ser Ala Ser Lys Lys Ser Thr
 180 185 190
 Val Thr Thr Phe Tyr Pro Gly Met Glu Val Val Ala Leu Ser His Asp
 195 200 205
 Val Asp Leu His Ala Glu Leu Pro Glu Trp Val Arg Val Gly Leu Ser
 210 215 220
 Ala Ser Thr Gly Glu Glu Lys Gln Lys Asn Thr Ile Ile Ser Trp Ser
 225 230 235 240
 Phe Thr Ser Ser Leu Lys Asn Asn Glu Val Lys Glu Pro Lys Glu Asp
 245 250 255
 Met Tyr Ile Ala Asn Val Val Arg Ser Tyr Thr Trp Ile Asn Asp Val
 260 265 270
 Leu Ser Tyr Ile Ser Asn Lys Met Tyr Asp Ala Leu Asn Asn Asn His
 275 280 285
 Lys Tyr Val Arg Cys Ser Thr Cys Met Leu Phe Met Lys Lys Lys
 290 295 300

<210> 7

<211> 678

<212> DNA

<213> Sphenostylis stenocarpa

<400> 7

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 aatgtcatac aactcaccaa gttagacagt aatgaaacc ctgtgagtag cagtgtggga 120
 agagtgttat actctgcacc attgcgcctt tggaaaagct ctacagttagt gtcaaccttt 180
 gagaccactt tcaccttca aatctcaaca ctttacacta gtcctcctgg tgatgggctc 240
 gccttcttcc ttgcaccata tgacactgtc atccctccaa attctgctgg caatcttctt 300
 ggactctttc ctaacttaaa tgctttaaga aactccacca ccagtaaaga aaccactatt 360
 gatgtcaatg ctgcatactaa caacgttggt gccgttgaat ttgacaccta ccctaacgac 420
 aatattggtg atccaagata caaacacatt ggaatcgatg tcaactctat caggtccaag 480
 gcaactgttg cgtggactg gaaaaatggg aaaacagcca ctgcacacat cagctataac 540
 tctgcctcta aaagactatc tgttactact ttttatcctg gggtaaagc tgtgagtctt 600

tcccatgacg ttgagctcac tcaagtgc_{tt} cctcaatgga ttagagtagg gttctctgct 660
 tcaacaggat tagagaaa 678

<210> 8
 <211> 234

<212> PRT

<213> Sphenostylis stenocarpa

<400> 8

Ala	Gln	Ser	Val	Ser	Phe	Thr	Phe	Thr	Lys	Phe	Asp	Ser	Asp	Gln	Lys
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Asp	Leu	Met	Phe	Gln	Gly	His	Thr	Ile	Ser	Ser	Ser	Asn	Val	Ile	Gln
				20				25					30		

Leu	Thr	Lys	Leu	Asp	Ser	Asn	Gly	Asn	Pro	Val	Ser	Thr	Ser	Val	Gly
		35				40						45			

Arg	Val	Leu	Tyr	Ser	Ala	Pro	Leu	Arg	Leu	Trp	Glu	Ser	Ser	Thr	Val
					50		55				60				

Val	Ser	Thr	Phe	Glu	Thr	Thr	Phe	Thr	Gln	Ile	Ser	Thr	Pro	Tyr
				65		70			75				80	

Thr	Ser	Pro	Pro	Gly	Asp	Gly	Leu	Ala	Phe	Phe	Leu	Ala	Pro	Tyr	Asp
				85				90					95		

Thr	Val	Ile	Pro	Pro	Asn	Ser	Ala	Gly	Asn	Leu	Leu	Gly	Leu	Phe	Pro
				100			105					110			

Asn	Leu	Asn	Ala	Leu	Arg	Asn	Ser	Thr	Thr	Ser	Lys	Glu	Thr	Thr	Ile
					115		120				125				

Asp	Val	Asn	Ala	Ala	Ser	Asn	Asn	Val	Val	Ala	Val	Glu	Phe	Asp	Thr
					130		135				140				

Tyr	Pro	Asn	Asp	Asn	Ile	Gly	Asp	Pro	Arg	Tyr	Lys	His	Ile	Gly	Ile
				145		150			155			160			

Asp	Val	Asn	Ser	Ile	Arg	Ser	Lys	Ala	Thr	Val	Ala	Trp	Asp	Trp	Gln
				165			170					175			

Asn	Gly	Lys	Thr	Ala	Thr	Ala	His	Ile	Ser	Tyr	Asn	Ser	Ala	Ser	Lys
				180			185					190			

Arg	Leu	Ser	Val	Thr	Thr	Phe	Tyr	Pro	Gly	Gly	Lys	Ala	Val	Ser	Leu
				195			200				205				

Ser	His	Asp	Val	Glu	Leu	Thr	Gln	Val	Leu	Pro	Gln	Trp	Ile	Arg	Val
				210		215			220						

Gly	Phe	Ser	Ala	Ser	Thr	Gly	Leu	Glu	Lys
				225		230			

<210> 9

<211> 15

<212> PRT

<213> Sphenostylis stenocarpa

<400> 9

Ala Gln Ser Val Ser Phe Thr Phe Thr Lys Phe Asp Ser Asp Gln
1 5 10 15

<210> 10

<211> 16

<212> PRT

<213> Sphenostylis stenocarpa

<220>

<221> VARIANT

<222> 14

<223> Xaa = Any Amino Acid

<400> 10

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